The NVAP Project – NVAP (the NASA Water Vapor Project) began as a project to create a record of the distribution of Earth's water vapor on a daily basis, with gridded total column and layered water vapor over both ocean and land. A reanalysis and extension of (NVAP), called **NVAP-M** spans 1988-2009. **NVAP-M** completely supersedes the heritage NVAP data set.

Data Products – NVAP-M has layered and total precipitable water values, with separate datasets designed for Climate, Weather, and Ocean studies. Climate and Ocean datasets have daily values. The Weather dataset has 6-hourly values. Each data stream except the Ocean will include information regarding the total precipitable water (TPW) as well as the vertical distribution of water vapor over 4 broad atmospheric layers: Surface - 700 hPa, 700 - 500 hPa, 500 - 300 hPa, and <300 hPa. **NVAP-M** Ocean will include TPW only.

Data from the **NVAP-M** project are written in netCDF 4.0 format and can be found in the **NVAP-M** pages of the ASDC website: https://eosweb.larc.nasa.gov/project/nvap/nvap-m_table. Each file contains several grids of data, depending on product, including one array of floating point numbers describing the total or layered water vapor.

Documentation – We recommend reading the NVAP-M User Guide and NVAP-M ATBD documents.

Dataset Organization – The datasets are stored as netCDF files and are organized by type of study area: Climate, Weather, and Ocean.variables mapped on a uniform space-time grid.

Ordering Data – Use the ASDC HTML TOOL or the Reverb Search Tool. Register as a New User, if you have not already registered.

Data Read and Display Tools – There are IDL read programs that are available when you select an NVAP-M dataset on the ASDC NVAP-M pages.

> **Panoply** is a netCDF, HDF, and GRIB viewer which creates maps of gridded NVAP-M data: http://www.giss.nasa.gov/tools/panoply/
>
> **ncBrowse** is a free, easy-to-use graphical tool for browsing netCDF files: http://www.epic.noaa.gov/java/ncBrowse/.

My NASA Data is an easy-to-use interface that displays a selected NVAP-M dataset, with several options to output the data. Go to the website and use the Live Access Server – Advanced: MY NASA DATA . Select Data Set -> Atmosphere -> Atmospheric Water Vapor -> Daily Total Column Water Vapor.

We hope this information is useful for you. If you have any questions, please contact us at support-asdc@earthdata.nasa.gov.

NASA Langley ASDC User Support

Preserving, managing, and sharing atmospheric data for the common good